SPECTROCHIMICA ACTA
PART B: ATOMIC SPECTROSCOPY

CONTENTS OF VOLUME 47B 1992

No. 1

PLASMA SPECTROSCOPY IV

Proceedings of the 1991 European Winter Conference on Plasma Spectroscopy

	1	Preface
G. M. Hieftje	3	Plasma diagnostic techniques for understanding and control
H. Nickel	27	Characterization of metallic and ceramic high-temperature materials for energy systems by means of atomic spectroscopy
T. Kishimoto, N. Wenzel, H. Grosse-Wilde, G. Lüpke and G. Marowsky	51	Experimental study of a CO_2 laser plasma by coherent anti-Stokes Raman scattering (CARS)
I. Steffan and G. Vujicic	61	ICP–AES analysis of nonconductive materials after spark ablation
O. S. Lunyov and S. V. Oshemkov	71	Determination of trace metals by laser-excited fluorescence with hot hollow cathode atomization
M. C. Quintero Ortega, J. Cotrino Bautista, M. Saez, A. Menendez Garcia, J. E. Sanchez Uria and A. Sanz Medel	79	Determination of iodide by low power surfatron microwave induced plasma after iodine continuous generation
		Technical Note
K. Eberhardt, G. Buchert, G. Herrmann and N. Trautmann	89	A microwave induced plasma operated at atmospheric and low pressure as an ion source for a mass separator
R. Gross, B. Platzer, E. Leitner, A. Schalk, H. Sinabell, H. Zach and G. Knapp	95	Atomic emission gas chromatographic detection—chemical and spectral interferences in the stabilized capacitive plasma (SCP)
N. Jakubowski, I. Feldmann and D. Stuewer	107	Analytical improvement of pneumatic nebulization in ICP–MS by desolvation

N. Jakubowski, I. Feldmann, D. Stuewer and H. Berndt 119 Hydraulic high pressure nebulization—application of a new nebulization system for inductively coupled plasma mass spectrometry

J. A. C. Broekaert, T. Bricker, K. R. Brushwyler and G. M. Hieftje 131 Investigations of a jet-assisted glow discharge lamp for optical emission spectrometry

H. Jenett and Y. Kikuta 143 Effects of instrumental parameters on quantification and depth resolution in secondary neutral mass spectrometry

C. Xhoffer, C. Lathen, W. Van Borm, J. A. C. Broekaert, W. Jacob and R. Van Grieken 155 Electron energy-loss spectroscopy and electron probe X-ray microanalysis of exhaust aerosols in slurry nebulization inductively coupled plasma atomic spectrometry for ceramic powders

K. Niebergall and R. Wennrich 173 Assessment of trace element content in penicillin G by inductively coupled plasma–atomic emission spectrometry for regulatory purposes

G. Bauer, W. Wegscheider and H. M. Ortner 179 Selectivity and limits of detection in inductively coupled plasma optical emission spectrometry using multivariate calibration

W. Schrön, M. Krieg, D. Wienke, M. Wagner and K. Danzer 189 Improvement of the detection limits in pure Al_2O_3 powder by thermochemical reactions in a d.c. arc plasma and non-linear blank correction

Analytical Note

G. Wünsch, S. Knobloch, J. Luck and W. Blödorn 199 Enrichment procedure for water analysis to fulfil the EPA detection limits with inductively coupled plasma atomic emission spectrometry

I *Aims and Scope*

No. 2

P. W. J. M. Boumans 203 Editorial: Pergamon/*Spectrochimica Acta* Atomic Spectroscopy Award 1990

L. Blain and E. D. Salin 205 Methodological solutions for the analysis of sediment samples by direct sample insertion inductively coupled plasma atomic emission

J. Bacri, A. M. Gomes and C. Le Drean 219 Behaviour of a low temperature argon plasma at atmospheric pressure seeded with some metallic aerosols under thermodynamic non-equilibrium conditions

Liang Lian 239 Fast furnace determinations of aluminum and iron in bone and soft tissues

O. Axner and S. Sjöström 245 ***Topics in Laser Spectroscopy:*** Experimental and theoretical investigation of pulsed step-wise laser excitations of atoms in flames—the role of two-step vs two-photon excitations and dynamical Stark effects

B. R. Todd and G. Horlick 275 An interferometer system for ultraviolet and visible Fourier transform spectrometry

B. V. L'vov, A. V. Novichikhin and L. K. Polzik 289 ***Views and Criticisms:*** Critical comments on the application of the adsorption/desorption concept in graphite furnace atomic absorption spectrometry

Research Note

B. V. Pavlović and J. S. Dobrosavljević 297 Electric characteristics of a hollow cathode discharge in a rotating magnetic field

K. Heilig 303 Bibliography on optical isotope shifts—Part IV October 1986 to May 1991

Announcements

327 Fifth International Symposium on Resonance Ionization Spectroscopy 1990

329 Gordon F. Kirkbright bursary

Spectrochimica Acta Electronica

G. B. King, B. R. Todd and G. Horlick E333 Qualitative spectral measurement characteristics of an ultraviolet-visible Fourier transform spectrometer

G. B. King and G. Horlick E353 An advanced user interface for processing and displaying interferometric and spectral data: SpectroPlot

i *Spectrochimica Acta Electronica Aims and Scope*

iii *Instructions for Readers*

v *Instructions for Authors*

xi *Spectrochimica Acta Part B Aims and Scope*

No. 3

R. Guevremont and K. Nimalasiri De Silva	371	Direct powder introduction ICP-AES with a photodiode array spectrometer: a powder sampler based on linear motion of the powder towards an uptake capillary
D. Rojas and W. Olivares	387	A method for the determination of the kinetic order and energy of the atom formation process in electrothermal atomization atomic absorption spectrometry (ETA-AAS)
L. Blain and E. D. Salin	399	Observations on the use of pellet direct sample insertion for inductively coupled plasma atomic emission spectrometry
J. Cotrino, M. Saez, M. C. Quintero, A. Menendez, E. Sanchez Uria and A. Sanz Medel	425	Spectroscopic determination of fundamental parameters in an argon microwave-induced plasma (surfatron) at atmospheric pressure
G. A. Petrucci and J. D. Winefordner	437	***Topics in Laser Spectroscopy:*** The double-resonance optogalvanic effect of neon as a sensitive photon detector
Zhiqiang Wu and W. G. Tong	449	***Topics in Laser Spectroscopy:*** Doppler-free measurement of the calcium $4s^2\,{}^1S_0$–$4s4p\,{}^1P_1$ transition at 422.673 nm by degenerate four-wave mixing in a demountable cathode discharge atomizer
Ma Yizai and Sun Di-jun	459	The determination of ytterbium with graphite furnace atomic absorption spectrometry using a pyrolytic graphite coated tube and a pyrolytic graphite coated tube lined with a tungsten spiral and a tantalum foil
A. Scheeline	473	News on Fundamental Reference Data
	475	***Announcements*** FIAS Short Course Second Rio Symposium on AAS Nineteenth Annual Meeting of the FACCS
	i	*Aims and Scope*

No. 4

W. R. L. Masamba, A. H. Ali and J. D. Winefordner	481	Temperature and electron density measurements in a helium/hydrogen capacitively coupled microwave plasma
T. D. Hettipathirana and M. W. Blades	493	Furnace atomization plasma excitation spectroscopy: spectral, spatial, and temporal characteristics

N. Shibata, N. Fudagawa and M. Kubota	505	Effects of hydrogen mixed with argon carrier gas in electrothermal vaporization–inductively coupled plasma–mass spectrometry
E. B. Saloman	517	***Topics in Laser Spectroscopy:*** A resonance ionization spectroscopy/resonance ionization mass spectrometry data service. III—Data sheets for Sb, Bi, P, Na and Sn
Xuan Weikang	545	Effects of Pd and Mg nitrate on the atomization of Ge in graphite furnace atomic absorption spectrometry
G. D. Rayson and D. Y. Shen	553	Application of an inductively coupled argon plasma axial viewing absorption technique using a power modulated plasma
H. Togashi, A. Hashizume and Y. Niwa	561	Molecular ionization in the interface of an inductively coupled plasma mass spectrometer
P. S. Doidge	569	***Views and Criticisms:*** Autoionizing lines of aluminium: their rôle in spectral interferences and atom number measurement of Al in a graphite furnace
R. W. Fonseca, O. A. Güell and J. A. Holcombe	573	***Views and Criticisms:*** Comments on the determination of the order of release during electrothermal atomization
S. J. Cathum, C. L. Chakrabarti and J. C. Hutton	577	***Views and Criticisms:*** Reply to comments on: Investigation of the order of copper atomization at the absorbance maximum in graphite furnace atomic absorption spectrometry
		Research Note
L. Darbha, M. V. Suryanarayana and S. Natarajan	581	Studies on the improvement of sensitivity by heating the spray chamber in ICP–OES
		Laboratory Note
H. Klinkenberg, Zicheng Peng, T. Beeren and K. Flach	585	Modifications of the roughing pump system of an Elan 500 ICP–MS for analysing complex matrices
	591	*Erratum*
	i	*Aims and Scope*

No. 5

J. Franzke, D. Veza and K. Niemax	593	***Topics in Laser Spectroscopy:*** An improved thermionic diode detector for analytical laser spectroscopy
J. Uebbing, A. Ciocan and K. Niemax	601	Optical emission spectrometry of a microwave induced plasma used with laser ablation of solid samples
A. Ciocan, J. Uebbing and K. Niemax	611	Analytical application of the microwave induced plasma used with laser ablation of solid samples
A. D'Ulivo, L. Lampugnani and R. Zamboni	619	Interference studies in the hydride generation atomic fluorescence spectrometric determination of selenium using signal shape analysis by a convolution technique
S. G. Johnson, B. L. Fearey, C. M. Miller and N. S. Nogar	633	***Topics in Laser Spectroscopy:*** Resonance ionization mass spectrometry of thorium: determination of the autoionization level structure and a re-determination of the ionization potential
B. Welz and Tiezheng Guo	645	Formation and interpretation of double peaks in flow injection hydride generation atomic absorption spectrometry
R. F. Browner, A. Canals and V. Hernandis	659	Effect of analyte and solvent transport on signal intensities in inductively coupled plasma atomic emission spectrometry
S. Chattaraj and A. K. Das	675	Indirect determination of thiocyanate in biological fluids using atomic absorption spectrometry
J. Vlček and V. Pelikán	681	Collisional-radiative ionization and recombination in an inductively coupled argon plasma
J. Dědina	689	Quartz tube atomizers for hydride generation atomic absorption spectrometry: mechanism of selenium hydride atomization and fate of free atoms
Zhang Li, S. McIntosh, G. R. Carnrick and W. Slavin	701	Hydride generation flow injection using graphite furnace detection: emphasis on determination of tin
Wang Jianping and Deng Bo	711	Investigation of the atomization mechanism of iron on the graphite probe surface in a graphite furnace
P. Hocquellet	719	Electrothermal atomic absorption spectrometry by reatomization from a second trapping surface

J. W. Carnahan and G. M. Hieftje 731 Helium–chlorine charge transfer: an explanation for chlorine ion emission behavior in helium discharges

Research Note

W. Luecke 741 The ionization behaviour of the alkaline earth metals in the air–acetylene and nitrous oxide–acetylene flames

I. Roelandts 749 ***News on Reference Materials:*** Copper and copper alloy reference materials

759 ***Conference Announcement***
1993 European Winter Conference on Plasma Spectrochemistry
Granada, Spain, 10–15 January 1993

No. 6

761 Obituary—Professor Károly Zimmer 1928–1991

Mao Huang, D. S. Hanselman, Pengyuan Yang and G. M. Hieftje 765 Isocontour maps of electron temperature, electron number density and gas kinetic temperature in the Ar inductively coupled plasma obtained by laser-light Thomson and Rayleigh scattering

Ch. Frigge and E. Jackwerth 787 Spectral interferences in the determination of traces of Pd in the presence of lead by atomic absorption spectroscopy

F. Scheerer, F. Albus, F. Ames, H.-J. Kluge and N. Trautmann 793 ***Topics in Laser Spectroscopy:*** An efficient excitation scheme for resonance ionization of tin in a laser ion source

A. Clark, K. W. D. Ledingham, A. Marshall and R. P. Singhal 799 ***Topics in Laser Spectroscopy:*** Resonant ionization spectroscopy of carbon atoms following laser-induced fragmentation of nitro-aromatic molecules

S. D. Tanner 809 Space charge in ICP–MS: calculation and implications

J. A. Koropchak, M. Veber and J. Herries 825 Fused silica aperture thermospray sample introduction to inductively coupled plasma atomic emission spectrometry

J. T. Clay and T. M. Niemczyk 835 Factors influencing iron excitation in nitrogen/rare gas microwave plasmas

B. V. L'vov, N. V. Kocharova, L. K. Polzik, N. P. Romanova and Yu. I. Yarmak 843 Quality control of hollow cathode lamps in Zeeman graphite furnace atomic absorption spectrometry

Technical Note

T. J. Manning 855 Accurate mirror movement design for interferometry

i Aims and Scope

No. 7

Z. Weiss 859 Quantitative evaluation of depth profiles analysed by glow discharge optical emission spectroscopy: analysis of diffusion processes

N. I. Uzelac and F. Leis 877 Measurement of gas temperatures and metastable state densities in a microwave boosted glow discharge using a diode laser

B. V. L'vov, L. K. Polzik and N. V. Kocharova 889 Theoretical analysis of calibration curves for graphite furnace atomic absorption spectrometry

S. McIntosh, Zhang Li, G. R. Carnrick and W. Slavin 897 The determination of tin in steel samples by flow injection hydride generation atomic absorption spectroscopy

R. D. Ediger and S. A. Beres 907 The role of chemical modifiers in analyte transport loss interferences with electrothermal vaporization ICP–mass spectrometry

M. J. Jahl and R. M. Barnes 923 Sealed inductively coupled plasma–atomic emission spectroscopy II: determination of phosphorus

I. Roelandts 935 ***News on Reference Materials:*** Additional geochemical reference materials

I. Roelandts 947 ***News on Reference Materials:*** Inductively coupled plasma determination of nine rare-earth elements in five ferro-manganese nodule reference samples

957 *Erratum*

i *Aims and Scope*

No. 8

E. Tserovsky, S. Arpadjan and I. Karadjova	959	Chemical modification of volatile elements in organic solvents and extracts by dithiocarbamate and complexes of noble metals in electrothermal atomic absorption spectroscopy
A. Kuczumow, J. A. Helsen and R. Wouters	971	A uniform Laplacian procedure for X-ray fluorescence analysis, electron microprobe and particle-induced X-ray emission
J. Kawai, M. Takami, M. Fujinami, Y. Hashiguchi, S. Hayakawa and Y. Gohshi	983	A numerical simulation of total reflection X-ray photoelectron spectroscopy (TRXPS)
J. Posta and H. Berndt	993	A high performance flow/hydraulic high pressure nebulization system (HPF/HHPN) in flame–AAS for improved elemental trace determination in highly concentrated salt solutions
E. H. Evans and J. A. Caruso	1001	Optimization strategies for the reduction of non-spectroscopic interferences in inductively coupled plasma mass spectrometry
G. P. Miller	1013	Long-term intensity oscillations in a pulsed inductively coupled plasma
D. A. Katskov, A. M. Shtepan, I. L. Grinshtein and A. A. Pupyshev	1023	Atomization of aluminium oxide in electrothermal atomic absorption analysis
B. Welz	1043	***Views and Criticisms:*** Symbols and units for integrated absorbance in electrothermal atomic absorption spectrometry (ET–AAS)
		Analytical Note
E.-J. Puttman, M. Heijting and P. de Smet	1045	Fast spark emission on small solid samples
		Announcement
	1051	FACSS XIX Conference, September 1992
	i	*Aims and Scope*

No. 9

Jinfu Yang, Zhexiu Piao, Xianjin Zeng, Zhuoyong Zhang and Xinhai Chen	1055	Evaluation of the reliability of Kalman filtering results in inductively coupled plasma atomic emission spectrometry
C. P. Hanna, J. F. Tyson and S. G. Offley	1065	Determination of arsenic in a nickel alloy by flow injection hydride generation atomic absorption spectrometry

A. Kh. Gilmutdinov, T. M. Abdullina, S. F. Gorbachev and V. L. Makarov 1075 Concentration curves in atomic absorption spectrometry

G. Brunner, F. Korneck, G. Müller-Vogt, W. Wendl and W. Send 1097 The application of sputtering as a new sampling technique in graphite furnace atomic absorption spectrometry

R. H. Clifford, P. Sohal, Huiying Liu and A. Montaser 1107 Diagnostic studies on desolvated aerosols from ultrasonic nebulizers

Research Note

D. C. Grégoire, S. Al-Maawali and C. L. Chakrabarti 1123 Use of Mg/Pd chemical modifiers for the determination of volatile elements by electrothermal vaporization ICP–MS: effect on mass transport efficiency

Spectrochimica Acta Electronica

M. W. Borer, N. N. Sesi, T. K. Starn and G. M. Hieftje E1135 A LabVIEW®2 program for data collection and calculation of figures of merit

i *Spectrochimica Acta Electronica Aims and Scope*

iii *Instructions for Readers*

v *Instructions for Authors*

xi *Spectrochimica Acta Part B Aims and Scope*

No. 10

P. W. J. M. Boumans 1153 Editorial

D. C. Baxter, R. Nichol and D. Littlejohn 1155 Evaluation of cold vapour furnace atomic non-thermal excitation spectrometry for the determination of mercury in environmental samples

M. B. de la Calle-Guntiñas, R. Torralba, Y. Madrid, M. A. Palacios, M. Bonilla and C. Cámara 1165 A study of hydride forming elements in the determination of As by hydride generation atomic absorption spectrometry and minimization of Sb and Se interference by α-hydroxyacids and KI

M. Kuraica, N. Konjević, M. Platiša and D. Pantelić 1173 Plasma diagnostics of the Grimm-type glow discharge

B. V. L'vov, L. K. Polzik, N. V. Kocharova, Yu. A. Nemets and A. V. Novichikhin 1187 Linearization of calibration curves in Zeeman atomic absorption spectrometry

P. R. Banks and M. W. Blades 1203 An investigation of directed support gas flows for the improvement of sampling efficiency in glow discharges

H. Matusiewicz 1221 A novel microwave plasma cavity assembly for atomic emission spectrometry

K. J. Jones and J. W. Carnahan 1229 Helium ion–nonmetal charge transfer: an explanation for nonmetal ion emission behavior in helium and argon discharges

Analytical Note

S. Itoh, F. Hirose and R. Hasegawa 1241 Determination of alloying elements and trace titanium in 2.25Cr–1Mo steel by glow discharge mass spectrometry

i *Aims and Scope*

No. 11

L. Ebdon and P. Goodall 1247 Thermochemical effects in hexafluoroethane (Freon 116) modified argon inductively coupled plasmas

I. S. Borthwick, K. W. D. Ledingham and R. P. Singhal 1259 ***Topics in Laser Spectroscopy:*** Resonant laser ablation—a novel surface analytic technique

Huancheng Qiao and K. W. Jackson 1267 Modification by palladium in the analysis of slurries by graphite furnace atomic absorption spectrometry: a physical mechanism

Pingxin Wang and J. A. Holcombe 1277 Pressure-regulated electrothermal atomizer for atomic absorption spectrometry

P. R. Banks and M. W. Blades 1287 Atomic excitation in a jet-assisted glow discharge plasma plume

C. Lazik and R. K. Marcus 1309 Effect of limiting orifice (anode) geometry in radio frequency glow discharge emission spectrometry

A. A. Ganeyev and S. E. Sholupov 1325 New Zeeman atomic absorption spectroscopy approach for mercury isotope analysis

Report and Announcement

W. Fischer 1339 Surface analysis in glow discharge optical spectrometry (GD–OES layer analysis)

i *Aims and Scope*

No. 12

K. E. A. Ohlsson, E. Iwamoto, W. Frech and A. Cedergren	1341	Transfer of aluminium compounds and spike atomization in a spatially isothermal graphite atomizer
Y. Q. Tang, Y. P. Du, J. C. Shao, C. Liu, W. Tao and M. H. Zhu	1353	Air–argon inductively coupled plasma for organic solution analysis: spectral characteristics and analytical performances
J. C. Ivaldi, D. Tracy, T. W. Barnard and W. Slavin	1361	Multivariate methods for interpretation of emission spectra from the inductively coupled plasma
T. Jacksier, M. J. Jahl and R. M. Barnes	1373	Noise power spectral characteristics of a sealed inductively coupled plasma for atomic emission spectroscopy
P. Möller, P. Dulski and J. Luck	1379	Determination of rare earth elements in seawater by inductively coupled plasma–mass spectrometry
C. M. Ogilvie and P. B. Farnsworth	1389	Correlation spectroscopy as a probe of excitation and ionization mechanisms in the inductively coupled plasma
Y. An, S. N. Willie and R. E. Sturgeon	1403	Flow injection–hydride generation determination of arsenic with *in situ* concentration in a graphite furnace
B. V. L'vov, L. K. Polzik, P. N. Fedorov and W. Slavin	1411	Extension of the dynamic range in Zeeman graphite furnace atomic absorption spectrometry
		Announcement
	1421	Bunsen–Kirchhoff Prize

No. 13

D. Rojas	1423	A study of nickel electrothermal atomization
P. R. Banks and M. W. Blades	1435	Comparisons between a Grimm-type glow discharge and a jet-assisted glow discharge source viewed axially and laterally
F. H. A. G. Fey, J. M. de Regt, J. A. M. van der Mullen and D. C. Schram	1447	The effect of evaporation on the analyte emission intensities during power interruption in an inductively coupled plasma

W. Frech, B. V. L'vov and N. P. Romanova 1461 Condensation of matrix vapours in the gaseous phase in graphite furnace atomic absorption spectrometry

L. Blain and E. D. Salin 1471 Application of AgCl as a thermochemical additive for the determination of refractory elements in solid sediment samples by direct sample insertion inductively coupled plasma atomic emission spectrometry

C. A. Mahan and J. A. Holcombe 1483 Preconcentration of trace metals using silica-immobilized algae cells in a chromatographic separation procedure

R. L. Irwin, Guor-Tzo Wei, D. J. Butcher, Zhongwen Liang, E. G. Su, J. Takahashi, A. P. Walton and R. G. Michel 1497 ***Topics in Laser Spectroscopy:*** Transverse Zeeman background correction for graphite furnace laser excited atomic fluorescence spectrometry: determination of lead and cobalt in standard reference materials

1517 *Erratum*

No. 14

A. Zybin, C. Schnürer-Patschan and K. Niemax 1519 ***Topics in Laser Spectroscopy:*** Simultaneous multi-element analysis in a commercial graphite furnace by diode laser induced fluorescence

K. E. A. Ohlsson, A. Cedergren and W. Frech 1525 AlH spike formation in a graphite atomizer

O. A. Güell and J. A. Holcombe 1535 Monte Carlo optimization of signal-to-noise ratio for electrothermal atomizers

A. Scheeline 1545 News on Fundamental Reference Data

Spectrochimica Acta Electronica

E. Voigtman E1549 Computer modeling of fluorescence dip spectroscopy with pulsed laser excitation

M. Berglund and D. C. Baxter E1567 Methods of calibration in the direct analysis of solid samples by electrothermal atomic absorption spectrometry

D. P. Webb and E. D. Salin E1587 An electronic aid for line selection for scanning inductively coupled plasma atomic emission spectrometers

N. Daskalova, S. Velichkov, N. Krasnobaeva and P. Slavova E1595 Spectral interferences in the determination of traces of scandium, yttrium and rare earth elements in "pure" rare earth matrices by inductively coupled plasma atomic emission spectrometry—I. Cerium, neodymium and lanthanum matrices

L. L. Burton and G. Horlick E1621 MS InterView: An elemental mass spectrometry spectral interference data base

i *Spectrochimica Acta Electronica Aims and Scope*

iii *Spectrochimica Acta Electronica Instructions for Readers*

v *Spectrochimica Acta Electronica Instructions for Authors*

xi *Spectrochimica Acta Part B Aims and Scope*

xv *Volume Contents and Author Index for Volume* 47*B*, 1992

AUTHOR INDEX

Abdullina, T. M. 1075
Al-Maawali, S. 1123
Albus, F. 793
Ali, A. H. 481
Ames, F. 793
An, Y. 1403
Arpadjan, S. 959
Axner, O. 245

Bacri, J. 219
Banks, P. R. 1203, 1287, 1435
Barnard, T. W. 1361
Barnes, R. M. 923, 1373
Bauer, G. 179
Baxter, D. C. 1155, E1567
Beeren, T. 585
Beres, S. A. 907
Berglund, M. E1567
Berndt, H. 119, 993
Blades, M. W. 493, 1203, 1287, 1435
Blain, L. 205, 399, 1471
Blödorn, W. 199
Bonilla, M. 1165
Borer, M. W. E1135
Borthwick, I. S. 1259
Boumans, P. W. J. M. 203, 1153
Bricker, T. 131
Broekaert, J. A. C. 131, 155
Browner, R. F. 659
Brunner, G. 1097
Brushwyler, K. R. 131
Buchert, G. 89
Burton, L. L. E1621
Butcher, D. J. 1497

Cámara, C. 1165
Canals, A. 659
Carnahan, J. W. 731, 1229
Carnrick, G. R. 701, 897
Caru ɔ, J. A. 1001
Cathum, S. J. 577
Cedergren, A. 1341, 1525
Chakrabarti, C. L. 577, 1123
Chattaraj, S. 675
Ciocan, A. 601, 611
Clark, A. 799
Clay, J. T. 835
Clifford, R. H. 1107
Cotrino Bautista, J. 79, 425

D'Ulivo, A. 619
Danzer, K. 189
Darbha, L. 581
Das, A. K. 675
Daskalova, N. E1595
de la Calle-Guntiñas, M. B. 1165
de Regt, J. M. 1447
de Smet, P. 1045
Dedina, J. 689
Deng Bo 711
Dobrosavljevic, J. S. 297
Doidge, P. S. 569
Du, Y. P. 1353
Dulski, P. 1379

Ebdon, L. 1247
Eberhardt, K. 89
Ediger, R. D. 907
Evans, E. H. 1001

Farnsworth, P. B. 1389
Fearevy, B. L. 633
Fedorov, P. N. 1411
Feldmann, I. 107, 119
Fey, F. H. A. G. 1447
Fischer, W. 1339
Flach, K. 585
Fonseca, R. W. 573
Franzke, J. 593
Frech, W. 1341, 1461, 1525
Frigge, Ch. 787
Fudagawa, N. 505
Fujinami, M. 983

Ganeyev, A. A. 1325
Gilmutdinov, A. Kh. 1075
Gohshi, Y. 983
Gomes, A. M. 219
Goodall, P. 1247
Gorbachev, S. F. 1075
Grégoire, D. C. 1123
Grinshtein, I. L. 1023
Gross, R. 95
Grosse-Wilde, H. 51
Güell, O. A. 573, 1535
Guevremont, R. 371
Guor-Tzo Wei 1497

Hanna, C. P. 1065
Hanselman, D. S. 765
Hasegawa, R. 1241
Hashiguchi, Y. 983
Hashizume, A. 561
Hayakawa, S. 983
Heijting, M. 1045
Heilig, K. 303
Helsen, J. A. 971
Hernandis, V. 659
Herries, J. 825
Herrmann, G. 89
Hettipathirana, T. D. 493
Hieftje, G. M. 3, 131, 731, 765, E1135
Hirose, F. 1241
Hocquellet, P. 719
Holcombe, J. A. 573, 1277, 1483, 1535
Horlick, G. 275, E333, E353, E1621
Huancheng Qiao 1267
Huiying Liu 1107
Hutton, J. C. 577

Irwin, R. L. 1497
Itoh, S. 1241
Ivaldi, J. C. 1361
Iwamoto, E. 1341

Jacksier, T. 1373
Jackson, K. W. 1267
Jackwerth, E. 787
Jacob, W. 155
Jahl, M. J. 923, 1373
Jakubowski, N. 107, 119
Jenett, H. 143
Jinfu Yang 1055
Johnson, S. G. 633
Jones, K. J. 1229

Karadjova, I. 959
Katskov, D. A. 1023
Kawai, J. 983
Kikuta, Y. 143
King, G. B. E333, E353
Kishimoto, T. 51
Klinkenberg, H. 585
Kluge, H.-J. 793
Knapp, G. 95
Knobloch, S. 199
Kocharova, N. V. 843, 889, 1187
Konjevic, N. 1173
Korneck, F. 1097
Koropchak, J. A. 825
Krasnobaeva, N. E1595
Krieg, M. 189
Kubota, M. 505
Kuczumow, A. 971
Kuraica, M. 1173

L'vov, B. V. 289, 843, 889, 1187, 1411, 1461
Lampugnani, L. 619
Lathen, C. 155
Lazik, C. 1309
Le Drean, C. 219
Ledingham, K. W. D. 799, 1259
Leis, F. 877
Leitner, E. 95
Liang Lian 239
Littlejohn, D. 1155
Liu, C. 1353
Luck, J. 199, 1379
Luecke, W. 741
Lunyov, O. S. 71
Lüpke, G. 51

Ma Yizai 459
Madrid, Y. 1165
Mahan, C. A. 1483
Makarov, V. L. 1075
Manning, T. J. 855
Mao Huang 765
Marcus, R. K. 1309
Marowsky, G. 51
Marshall, A. 799
Masamba, W. R. L. 481
Matusiewicz, H. 1221
McIntosh, S. 701, 897
Menendez Garcia, A. 79, 425
Michel, R. G. 1497
Miller, C. M. 633
Miller, G. P. 1013
Möller, P. 1379
Montaser, A. 1107
Müller-Vogt, G. 1097

Natarajan, S. 581
Nemets, Yu. A. 1187
Nichol, R. 1155
Nickel, H. 27
Niebergall, K. 173
Niemax, K. 1519
Niemax, K. 593, 601, 611
Niemczyk, T. M. 835
Nimalasiri De Silva, K. 371
Niwa, Y. 561
Nogar, N. S. 633
Novichikhin, A. V. 289, 1187

Offley, S. G. 1065

Ogilvie, C. M. 1389
Ohlsson, K. E. A. 1341, 1525
Olivares, W. 387
Ortner, H. M. 179
Oshemkov, S. V. 71

Palacios, M. S. 1165
Pantelic, D. 1173
Pavlovic, B. V. 297
Pelikán, V. 681
Pengyuan Yang 765
Petrucci, G. A. 437
Pingxin Wang 1277
Platisa, M. 1173
Platzer, B. 95
Polzik, L. K. 289, 843, 889, 1187, 1411,
Posta, J. 993
Pupyshev, A. A. 1023
Puttman, E.-J. 1045

Quintero Ortega, M. C. 79, 425

Rayson, G. D. 553
Roelandts, I. 749, 935, 947
Rojas, D. 387, 1423
Romanova, N. P. 843, 1461

Saez, M. 79, 425
Salin, E. D. 205, 399, 1471, E1587
Saloman, E. B. 517
Sanchez Uria, J. E. 79, 425
Sanz Medel, A. 79, 425
Schalk, A. 95
Scheeline, A. 473, 1545
Scheerer, F. 793
Schnürer-Patschan, C. 1519
Schram, D. C. 1447
Schrön, W. 189
Send, W. 1097
Sesi, N. N. E1135
Shao, J. C. 1353
Shen, D. Y. 553
Shibata, N. 505
Sholupov, S. E. 1325
Shtepan, A. M. 1023
Sinabell, H. 95
Singhal, R. P. 799, 1259
Sjöström, S. 245
Slavin, W. 701, 897, 1361, 1411
Slavova, P. E1595
Sohal, P. 1107
Starn, T. K. E1135
Steffan, I. 61
Stuewer, D. 107, 119
Sturgeon, R. E. 1403
Su, E. G. 1497
Sun Di-jun 459
Suryanarayana, M. V. 581

Takahashi, J. 1497
Takami, M. 983
Tang, Y. Q. 1353
Tanner, S. D. 809
Tao, W. 1353
Tiezheng Guo 645
Todd, B. R. 275, E333
Togashi, H. 561
Tong, W. G. 449
Torralba, R. 1165
Tracy, D. 1361
Trautmann, N. 89, 793
Tserovsky, E. 959
Tyson, J. F. 1065

Uebbing, J. 601, 611
Uzelac, N. I. 877

Van Borm, W. 155
van der Mullen, J. A. M. 1447
Van Grieken, R. 155
Veber, M. 825
Velichkov, S. E1595
Veza, D. 593
Vlcek, J. 681
Voigtman, E. E1549
Vujicic, G. 61

Wagner, M. 189
Walton, A. P. 1497
Wang Jianping 711
Webb, D. P. E1587
Wegscheider, W. 179
Weiss, Z. 859
Welz, B. 645, 1043
Wendl, W. 1097
Wennrich, R. 173
Wenzel, N. 51
Wienke, D. 189
Willie, S. N. 1403
Winefordner, J. D. 437, 481
Wouters, R. 971
Wünsch, G. 199

Xhoffer, C. 155
Xianjin Zeng 1055
Xinhai Chen 1055
Xuan Weikang 545

Yarmak, Yu. I. 843

Zach, H. 95
Zamboni, R. 619
Zhang Li 701, 897
Zhexiu Piao 1055
Zhiqiang Wu 449
Zhongwen Liang 1497
Zhu, M. H. 1353
Zhuoyong Zhang 1055
Zicheng Peng 585
Zybin, A. 1519

PRINTED AND BOUND IN GREAT BRITAIN BY BPCC-AUP ABERDEEN LTD